FIG. 1

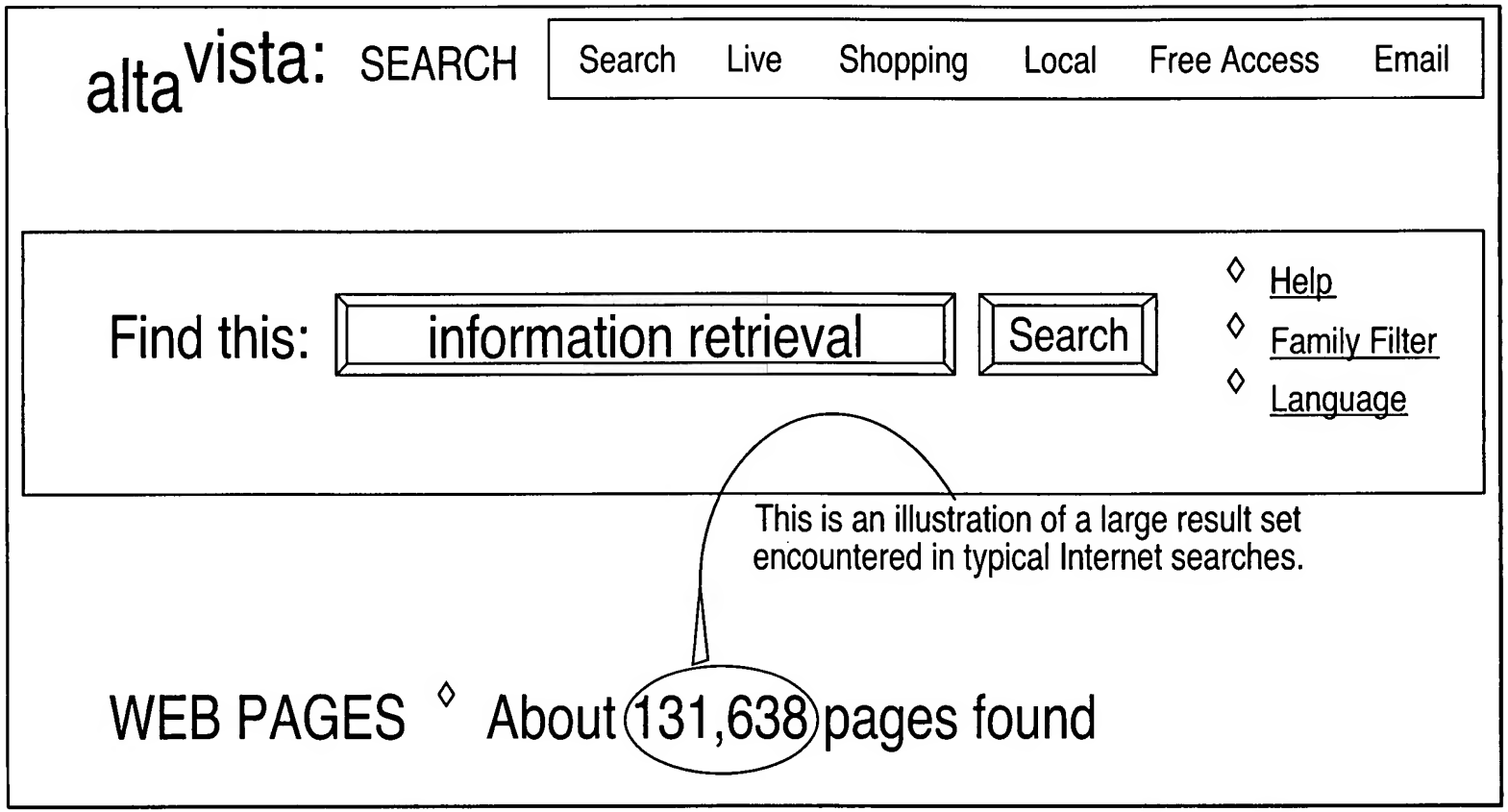
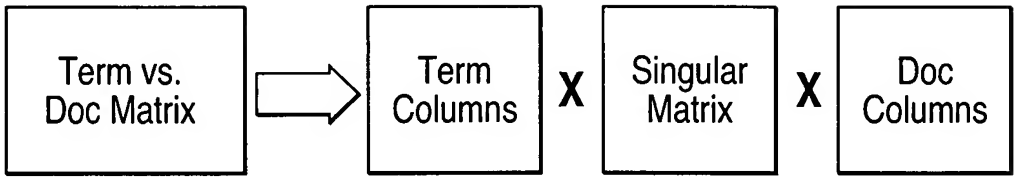

altavista: SEARCH
Search Live Shopping Local Free Access Email
Find this: information retrieval Search
Help
Family Filter
Language
This is an illustration of a large result set encountered in typical Internet searches.
WEB PAGES ◊ About 131,638 pages found

FIG. 2

	Doc #1	Doc #2	•••	Doc #n
able	1	0	•••	1
acid	0	2	•••	0
•••	•••	•••	•••	•••
<term m>	1	0		1

FIG. 3



SVD Extracts Key
Relationships among Terms-
Basis for Conceptual Matching

FIG. 4

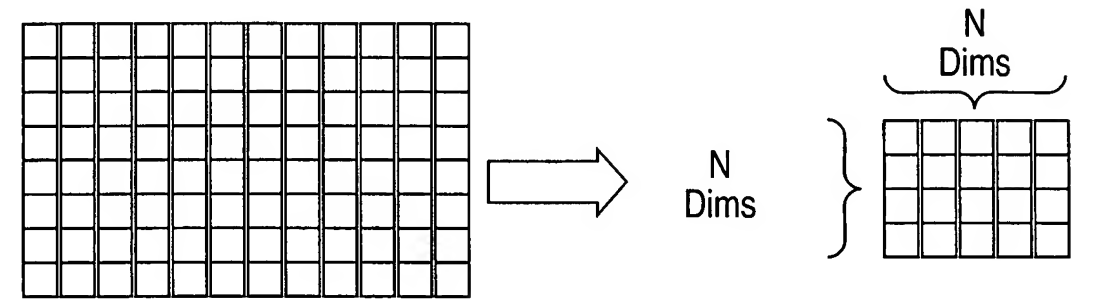

N
Dims
N
Dims
Large, Sparse Matrix
Typically, N= Several Hundred
LSI Vector Space

FIG. 5

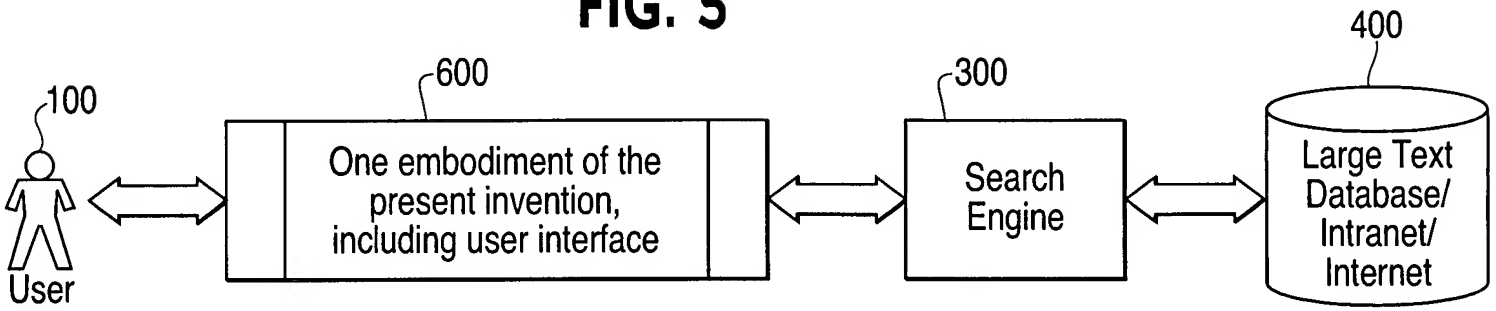

100
User
600
One embodiment of the present invention, including user interface
300
Search Engine
400
Large Text Database/ Intranet/ Internet

FIG. 6

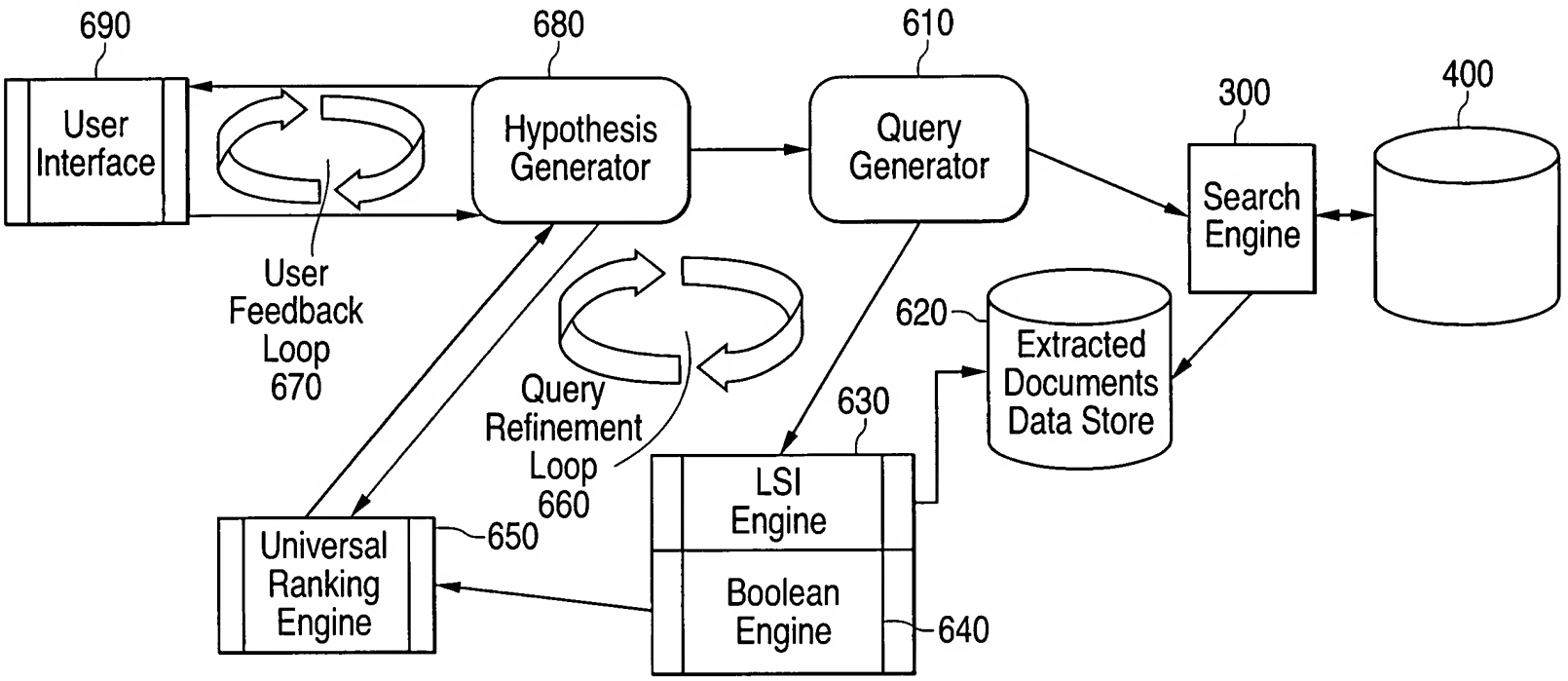

690
680
610
300
400
User Interface
Hypothesis Generator
Query Generator
Search Engine
User Feedback Loop 670
620
Extracted Documents Data Store
Query Refinement Loop 660
630
LSI Engine
Universal Ranking Engine
650
Boolean Engine
640

FIG. 7

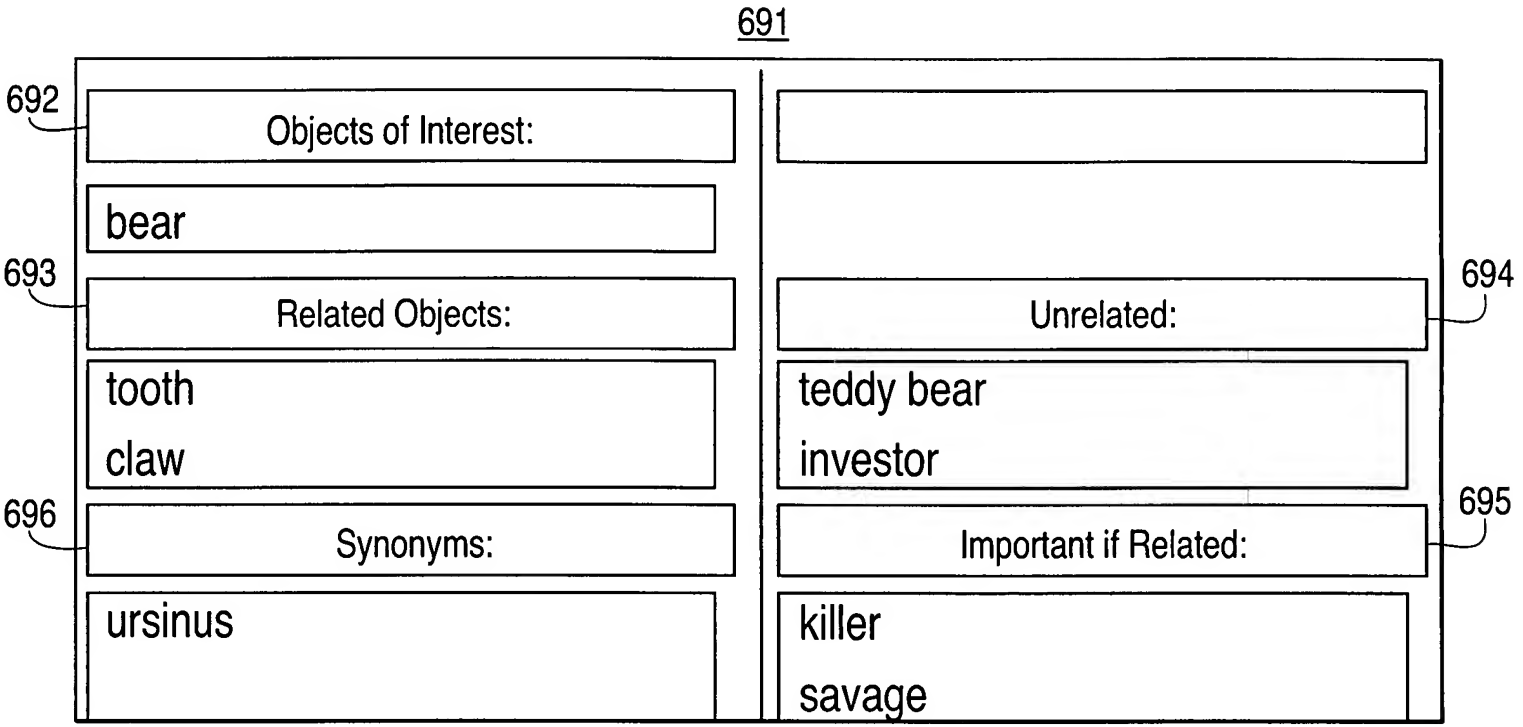

691
692
Objects of Interest:
bear
693
Related Objects:
tooth
claw
696
Synonyms:
ursinus
694
Unrelated:
teddy bear
investor
695
Important if Related:
killer
savage

FIG. 8

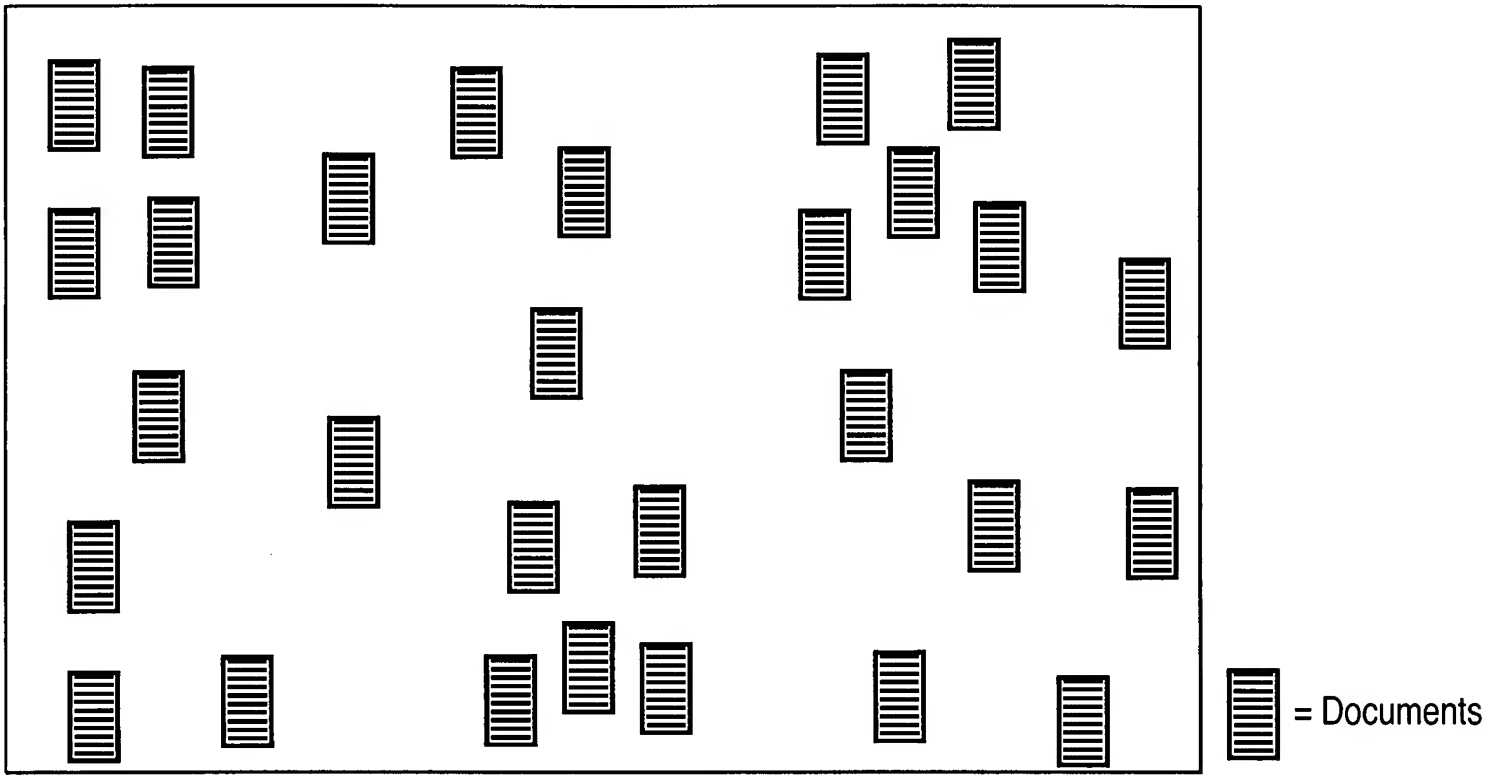
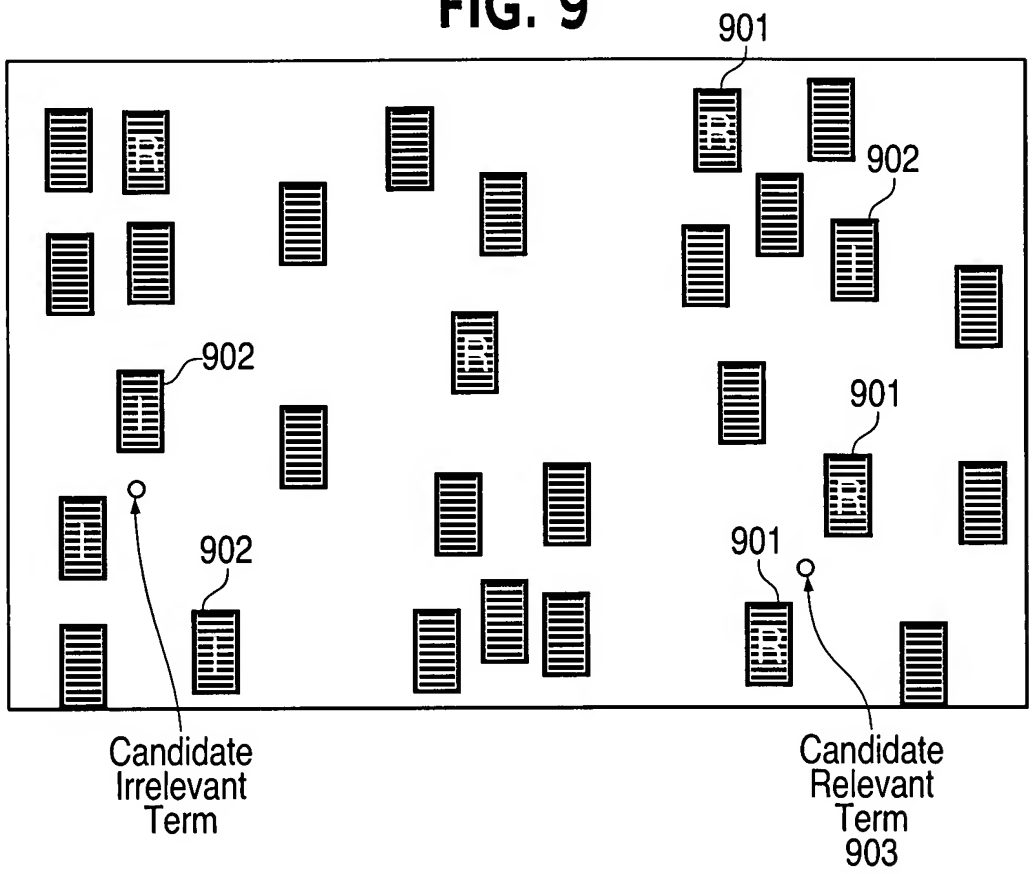


FIG. 9


901
902
902
901
902
901
Candidate Irrelevant Term
Candidate Relevant Term 903
R = Relevant Document
I = Irrelevant Document

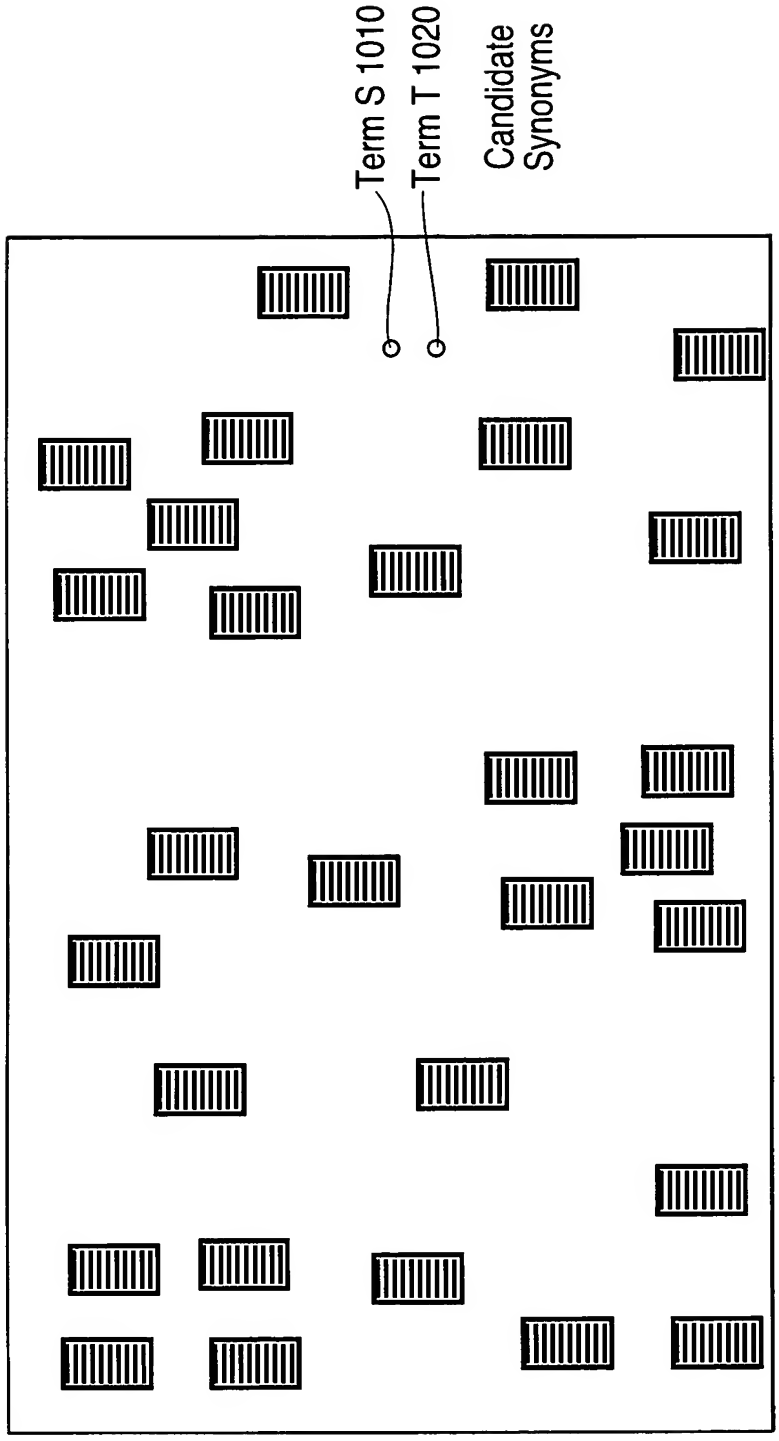
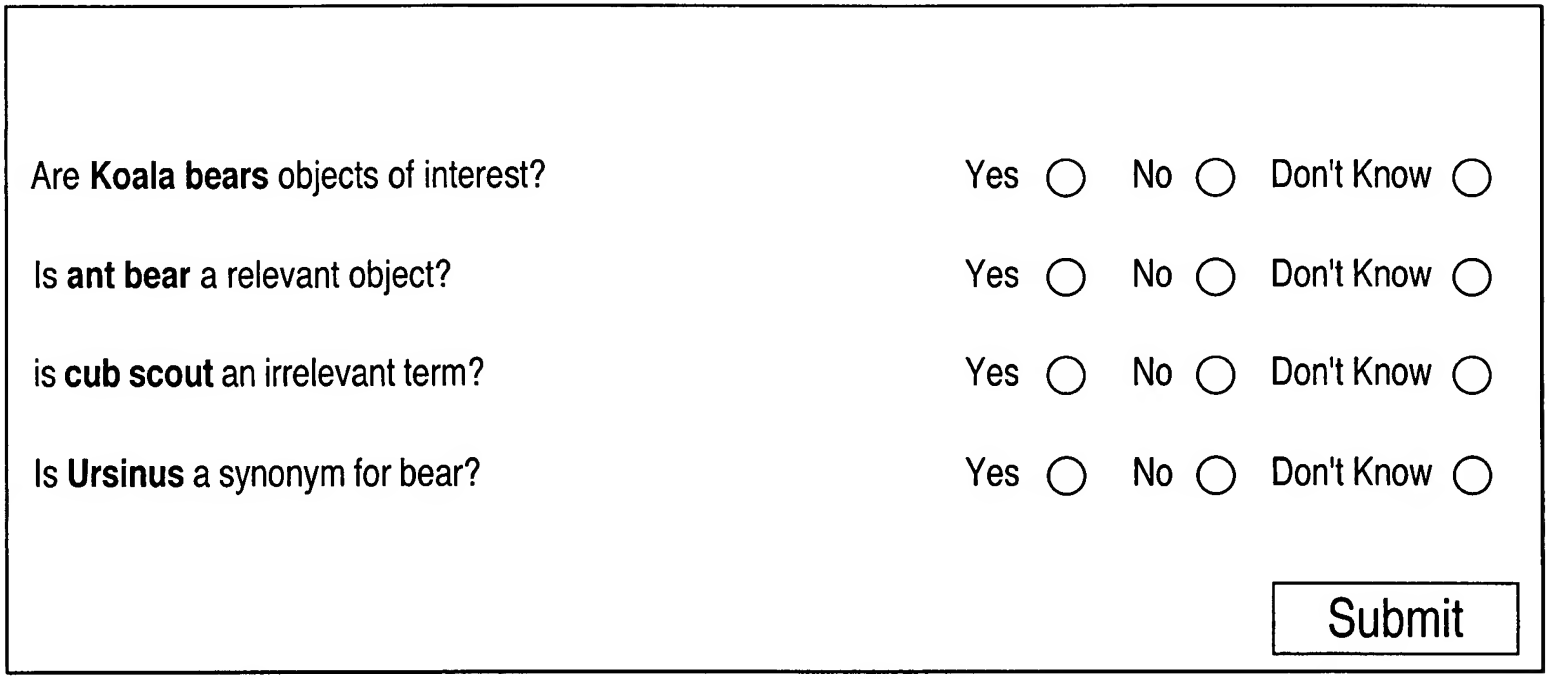


FIG. 10

FIG. 11


Are **Koala bears** objects of interest? Yes No Don't Know
Is **ant bear** a relevant object? Yes No Don't Know
is **cub scout** an irrelevant term? Yes No Don't Know
Is **Ursinus** a synonym for bear? Yes No Don't Know
Submit